

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

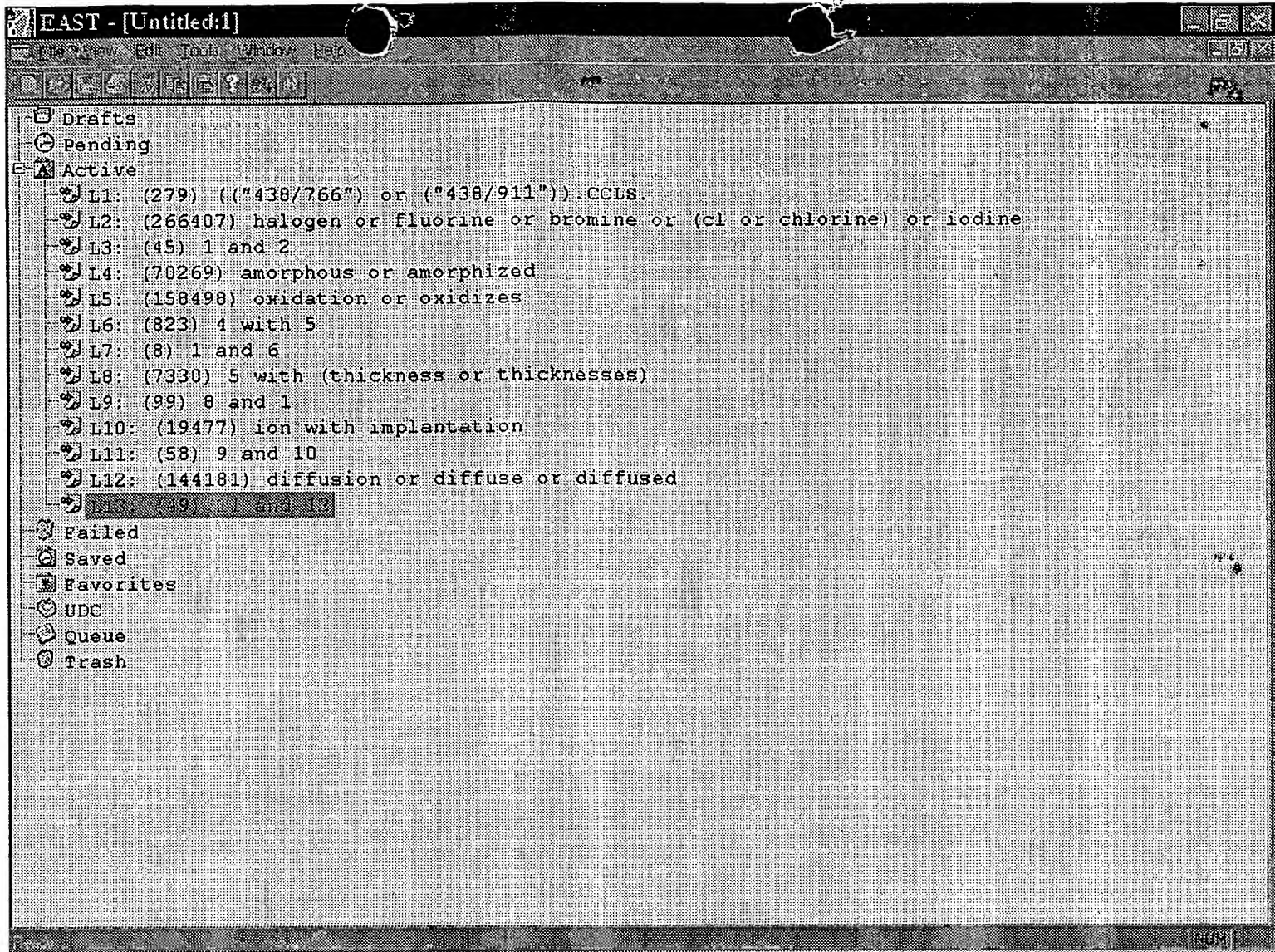
Defects in the images may include (but are not limited to):

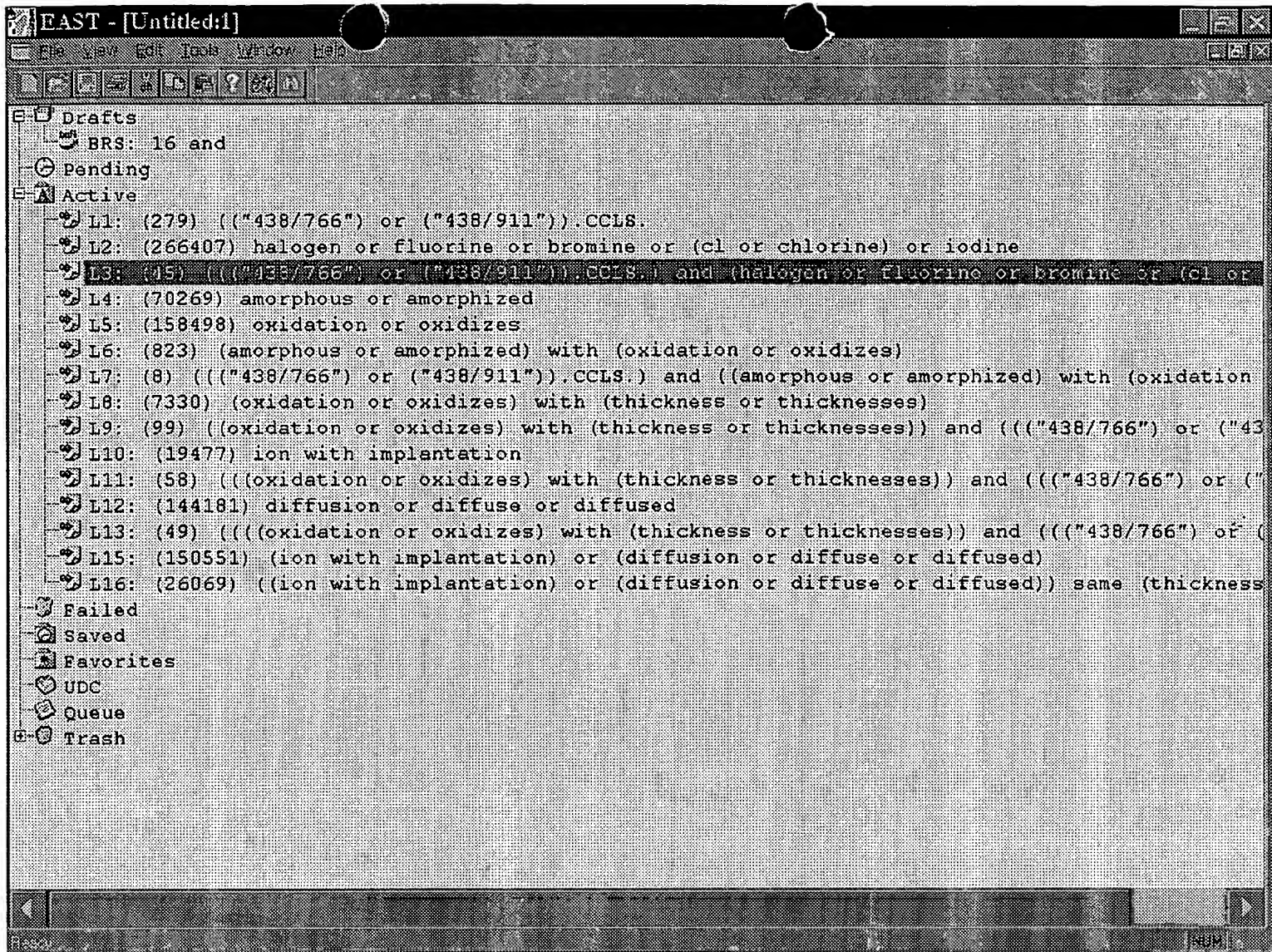
- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

	L #	Hits	Search Text	DBs
1	L1	235850	halogen or chlorine or fluorine or bromine or iodine	USPAT
2	L2	163	("438/766").CCLS.	USPAT
3	L3	25	1 and 2	USPAT





	Type	L #	Hits	Search Text
1	IS&R	L1	279	((("438/766") or ("438/911"))).CCLS.
2	BRS	L2	266407	halogen or fluorine or bromine or (cl or chlorine) or iodine
3	BRS	L3	45	1 and 2
4	BRS	L4	70269	amorphous or amorphized
5	BRS	L5	158498	oxidation or oxidizes
6	BRS	L6	823	4 with 5
7	BRS	L7	8	1 and 6
8	BRS	L8	7330	5 with (thickness or thicknesses)
9	BRS	L9	99	8 and 1
10	BRS	L10	19477	ion with implantation
11	BRS	L11	58	9 and 10
12	BRS	L12	144181	diffusion or diffuse or diffused
13	BRS	L13	49	11 and 12

	Type	L #	Hits	Search Text
1	IS&R		279	((("438/766") or ("438/911"))).CCLS.
2	BRS		266407	halogen or fluorine or bromine or (cl or chlorine) or iodine
3	BRS		45	((("438/766") or ("438/911"))).CCLS.) and (halogen or fluorine or bromine or (cl or chlorine) or iodine)
4	BRS		70269	amorphous or amorphized
5	BRS		158498	oxidation or oxidizes
6	BRS		823	(amorphous or amorphized) with (oxidation or oxidizes)
7	BRS		8	((("438/766") or ("438/911"))).CCLS.) and ((amorphous or amorphized) with (oxidation or oxidizes))
8	BRS		7330	(oxidation or oxidizes) with (thickness or thicknesses)
9	BRS		99	((oxidation or oxidizes) with (thickness or thicknesses)) and ((("438/766") or ("438/911"))).CCLS.)
10	BRS		19477	ion with implantation
11	BRS		58	((((oxidation or oxidizes) with (thickness or thicknesses)) and ((("438/766") or ("438/911"))).CCLS.)) and (ion with implantation)
12	BRS		144181	diffusion or diffuse or diffused
13	BRS		49	(((((oxidation or oxidizes) with (thickness or thicknesses)) and ((("438/766") or ("438/911"))).CCLS.)) and (ion with implantation)) and (diffusion or diffuse or diffused)
14	BRS		150551	(ion with implantation) or (diffusion or diffuse or diffused)

	Type	L #	Hits	Search Text
15	BRS		26069	((ion with implantation) or (diffusion or diffuse or diffused)) same (thickness or thicknesses)

	Type	L #	Hits	Search Text	DBs
1	IS&R	L1	279	((("438/766") or ("438/911"))).CCLS.	USPAT
2	BRS	L2	266407	halogen or fluorine or bromine or (cl or chlorine) or iodine	USPAT
3	BRS	L3	45	1 and 2	USPAT
4	BRS	L4	70269	amorphous or amorphized	USPAT
5	BRS	L5	158498	oxidation or oxidizes	USPAT
6	BRS	L6	823	4 with 5	USPAT
7	BRS	L7	8	1 and 6	USPAT

~~1 and 5~~

221589

8 1 and 5
9 thickness or thicknesses

~~10 8~~

8 5 with (thickness or thicknesses)

9 8 and 1

look at text
for highlighted
terms

	Type	L #	Hits	Search Text
1	IS&R		440	((("438/766") or ("438/770") or ("438/911"))).CCLS.
2	BRS		266407	halogen or fluorine or bromine or iodine or (chlorine or Cl)
3	BRS		135	differential adj oxidation
4	BRS		266527	(halogen or fluorine or bromine or iodine or (chlorine or Cl)) or (differential adj oxidation) <i>and</i>
5	BRS		78	((("438/766") or ("438/770") or ("438/911"))).CCLS.) and (halogen or fluorine or bromine or iodine or (chlorine or Cl))
6	BRS		82	((("438/766") or ("438/770") or ("438/911"))).CCLS.) and ((halogen or fluorine or bromine or iodine or (chlorine or Cl)) or (differential adj oxidation))
7	BRS	L49	4	((("438/766") or ("438/770") or ("438/911"))).CCLS.) and (differential adj oxidation)
8	BRS	L50	0	4 and 6
9	BRS	L51	174	438/766
10	BRS	L52	0	51 and 3













halogen <and> oxidation

Refine

Collection: ☒ Journals ☒ Conferences ☒ Standards

Your search matched 18 of 623335 documents.

18 are presented on this page, sorted by Score in descending order.

DOC TYPE	VIEW ISSUE TOC	VIEW FULL PAGE	VIEW CITATION
CNF			<p><u>Non halogen/antimony flame retardant system for high end IC package</u> Yamaguchi, M.; Shigyo, H.; Yamamoto, Y.; Sudo, S.; Ito, S. Electronic Components and Technology Conference, 1997. Proceedings., 47th , 1997 , Page(s): 1248 -1253</p>
CNF			<p><u>Reflow soldering using selective infrared radiation</u> Sakuyama, S.; Uchida, H.; Watanabe, I.; Natori, K.; Sato, T. Electronic Manufacturing Technology Symposium, 1995, Proceedings of 1995 Japan International, 18th IEEE/CPMT International , 1996 , Page(s): 393 -396</p>
CNF			<p><u>Low thermal budget polycrystalline silicon thin-film transistors fabricated by metal-induced lateral crystallization</u> Kim, T.-K.; Lee, B.-I.; Joo, S.-K. Device Research Conference Digest, 1998. 56th Annual , 1998 , Page(s): 100 -101</p>
CNF			<p><u>Rapid thermal processing of conventionally and electromagnetically cast 100 cm/sup 2/ multicrystalline silicon</u> Sivonthaman, S.; Laureys, W.; de Schepper, P.; Nijs, J.; Mertens, R. Photovoltaic Specialists Conference, 1996., Conference Record of the Twenty Fifth IEEE , 1996 , Page(s): 621 -624</p>
CNF			<p><u>Integrity of gate oxides formed on SIMOX wafers</u> Brown, G.A.; Hosack, H.H.; Joyner, K.; Krull, W.A. SOI Conference, 1994 Proceedings., 1994 IEEE International , 1994 , Page(s): 73 -74</p>
CNF			<p><u>Fabrication of SOI structures by uniform zone melting recrystallization for high voltage ICs</u> Dilhac, J.-M.; Zerrouk, D.; Ganibal, C.; Rossel, P.; Bafleur, M. Power Semiconductor Devices and ICs, 1996. ISPSD '96 Proceedings., 8th International Symposium on , 1996 , Page(s): 215 -218</p>

CNF



Application of p-phenylene derivatives as oxidants to the insulating polyethylene

Olszynska, J.; Dobroszewski, R.; Sudol, M.

Properties and Applications of Dielectric Materials, 1988. Proceedings., Second International Conference on Properties and Applications of , 1988 , Page(s): 396 -399 vol.2

CNF



Characterization and reliability of electrolytic capacitors exposed to halogenated solvents

MaSaitis, R.L.; Muller, A.J.; Opila, R.L.; Psota-Kelty, L.A.; Daoud, S.

Electronic Components and Technology Conference, 1992. Proceedings., 42nd , 1992 , Page(s): 611 -616

PER



Development of a hexagonal-shaped rapid thermal processor using a vertical tube

Byung Jin Cho; Vandenabeele, P.; Maex, K.

Semiconductor Manufacturing, IEEE Transactions on Volume: 7 3 , Aug. 1994 , Page(s): 345 -353

PER



The low-temperature anodization of silicon in a gaseous plasma

Barlow, K.J.; Taylor, S.; Eccleston, W.; Kiermasz, A.

Electron Devices, IEEE Transactions on Volume: 36 7 , July 1989 , Page(s): 1279 -1285

CNF



Airborne open path ir laser spectrometer for atmospheric trace gas measurements

Podolski, J.

Lasers and Electro-Optics, 1999. CLEO '99. Summaries of Papers Presented at the Conference on , 1999 , Page(s): 195

CNF



Shallow trench isolation for advanced ULSI CMOS technologies

Nandakumar, M.; Chatterjee, A.; Sridhar, S.; Joyner, K.; Rodder, M.; Chen, I.-C.

Electron Devices Meeting, 1998. IEDM '98 Technical Digest., International , 1998 , Page(s): 133 -136

CNF



Ultraclean Wafer Surfaces For High-Performance ULSI Processing

Ito, T.

Semiconductor Manufacturing, 1994. Extended Abstracts of ISSM '94. 1994 International Symposium on , Page(s): 103 -106

CNF



Vacuum ultraviolet-induced and enhanced oxidation of Si and GaAs in N/sub 2/O

Du, Y.C.; Hu, Y.M.; Wang, H.; Yao, X.W.; Zhao, Y.C.; Sun, D.C.; Li, F.M.

Solid-State and Integrated Circuit Technology, 1995 4th International Conference on , 1995 , Page(s): 674 -676

CNF



Rapid thermal multiprocessing using multivariable control of circularly symmetric 3 zone lamp

Apte, P.P.; Saraswat, K.C.

VLSI Technology, 1992. Digest of Technical Papers.
1992 Symposium on , 1992 , Page(s): 52 -53

PER



Microstructures and DC critical currents in textured

Y-Ba-Cu-oxides

*Orehotsky, J.; Wisemann, H.; Moodenbaugh, A.R.; Suenaga, M.;
Wang, H.-G.; Herman, H.*

Magnetics, IEEE Transactions on

Volume: 27 2 4 , March 1991 , Page(s): 914 -916

PER



**Understanding and implementation of rapid thermal
technologies for high-efficiency silicon solar cells**

Rohatgi, A.; Narasimha, S.; Ebong, A.U.; Doshi, P.

Electron Devices, IEEE Transactions on

Volume: 46 10 , Oct. 1999 , Page(s): 1970 -1977

PER



**Shallow-junction formation on silicon by rapid thermal
diffusion of impurities from a spin-on source**

Usami, A.; Ando, M.; Tsunekane, M.; Wada, T.

Electron Devices, IEEE Transactions on

Volume: 39 1 , Jan. 1992 , Page(s): 105 -110

| [IEL Online Home](#) | [Search](#) | [Advanced Search](#) | [What's New](#) | [Help](#) | [Logout](#) |
| [FAQ's](#) | [Support](#) | [Comments](#) |

Copyright 1999 Institute of Electrical and Electronics Engineers. All rights reserved.

* * * * * Welcome STN International * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Jun 2	KOREAN PATENTS NOW IN CAS DATABASES
NEWS 3	Jun 20	WIPO/PCT Patents Fulltext Database now on STN
NEWS 4	Jun 28	CAS covers Web-distributed preprints
NEWS 5	Jul 7	Patent Full-text Cluster, PNTTEXT, introduced
NEWS 6	Jul 27	EUROPATFULL - loading of backlog data
NEWS 7	Jul 27	MORE FREQUENT UPDATES FOR DERWENT WORLD PATENTS INDEX IN 2000
NEWS 8	Jul 27	Derwent Journal Of Synthetic Methods Reloaded with New Data
NEWS 9	Jul 27	DERWENT WORLD PATENTS INDEX: FAST TRACK RELEASE OF EQUIVALENT PATENTS
NEWS 10	Aug 21	Instant Access to FDA Regulatory Information with DIOGENES
NEWS 11	Aug 21	CAS patent coverage expanded
NEWS 12	Aug 24	TABULATE Now Available in More STN Databases
NEWS 13	Aug 28	MEDLINE from 1958 to Date - Only on STN
NEWS EXPRESS		FREE UPGRADE 5.0D FOR STN EXPRESS 5.0 WITH DISCOVER! (WINDOWS) NOW AVAILABLE
NEWS HOURS		STN Operating Hours Plus Help Desk Availability
NEWS INTER		General Internet Information
NEWS LOGIN		Welcome Banner and News Items
NEWS PHONE		Direct Dial and Telecommunication Network Access to STN
NEWS WWW		CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 18:45:44 ON 30 AUG 2000

=> halogen

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> file inspec

FILE 'INSPEC' ENTERED AT 18:46:14 ON 30 AUG 2000
Compiled and produced by the IEE in association with FIZ KARLSRUHE
COPYRIGHT 2000 (c) INSTITUTION OF ELECTRICAL ENGINEERS (IEE)

FILE LAST UPDATED: 28 AUG 2000 <20000828/UP>
FILE COVERS 1969 TO DATE.

=> halogen

L1 5581 HALOGEN

=> e oxidation +all/ct

E1	12179	BT1	CHEMICAL REACTIONS/CT
E2	32602	-->	OXIDATION/CT
		DA	JANUARY 1969
E3	0	UF	RAPID THERMAL OXIDATION/CT
E4	6983	NT1	COMBUSTION/CT
E5	1370	NT2	COMBUSTION SYNTHESIS/CT
E6	2588	RT	ANODISATION/CT
E7	16190	RT	CORROSION/CT

```

E8      3581      RT  ENVIRONMENTAL DEGRADATION/CT
E9      1082      RT  ISOLATION TECHNOLOGY/CT
E10     1859      RT  NITRIDATION/CT
E11     8850      RT  PASSIVATION/CT
E12     2009      RT  RAPID THERMAL PROCESSING/CT
E13     5226      RT  REDUCTION (CHEMICAL)/CT
E14     14160     RT  SEMICONDUCTOR TECHNOLOGY/CT
E15     16465     RT  SURFACE CHEMISTRY/CT
E16     12382     RT  SURFACE TREATMENT/CT
E17     14050     CC  A8160/CT
E18     9435      CC  A8230/CT
E19     32577     CC  B2550E/CT
E20      0        KT  ANODIC OXIDATION/CT
E21      0        KT  RAPID THERMAL OXIDATION/CT
*****  END  *****

```

=> e gate +all/ct

```

E1      0      -->  GATE/CT
E2     3295     KT  FIELD PROGRAMMABLE GATE ARRAYS/CT
E3      0      KT  GATE ARRAYS/CT
E4      0      KT  GATE TURN-OFF DEVICES/CT
E5     2603     KT  INSULATED GATE BIPOLAR TRANSISTORS/CT
E6     10946     KT  INSULATED GATE FIELD EFFECT TRANSISTORS/CT
E7     1199     KT  JUNCTION GATE FIELD EFFECT TRANSISTORS/CT
E8     5382     KT  SCHOTTKY GATE FIELD EFFECT TRANSISTORS/CT
*****  END  *****

```

=> e6

```

L2     10946  "INSULATED GATE FIELD EFFECT TRANSISTORS"/CT  (3 TERMS)

```

=> d his

(FILE 'HOME' ENTERED AT 18:45:44 ON 30 AUG 2000)

FILE 'INSPEC' ENTERED AT 18:46:14 ON 30 AUG 2000

```

L1     5581  HALOGEN
        E OXIDATION +ALL/CT
        E GATE +ALL/CT
L2     10946  E6

```

=> 11 and 12

```

L3      5  L1 AND L2

```

=> d 1-5 ab

L3 ANSWER 1 OF 5 INSPEC COPYRIGHT 2000 IEE

AB Metal-oxide-semiconductor field effect transistors (MOSFETs), fabricated in a simple Al gate process, have been subjected to rapid thermal annealing cycles of four different types immediately following the gate oxide growth. Fundamental MOS interface properties have been determined and compared as a function of the annealing temperature Tan. The influence of the steady state time tan at high temperature has been studied for a standard cycle; no effect was found for Tan=1200 degrees C and

3shalogen lamps, have been carried out to achieve good contact areas at low depth (0.1 μ m) as well as n-type channels of MIS transistors. The crystallographic disorder remaining after annealing and its influence on the carrier distribution are discussed. The uniformity of activation has been evaluated by wafer scanning of Hall effect and specific contact resistivity. Finally, characteristics of MIS transistors are given.

L3 ANSWER 3 OF 5 INSPEC COPYRIGHT 2000 IEE

AB A chemical vapor deposition reactor has been designed with tungsten halogen lamps as a source of radiant heat. This rapid thermal CVD system

can be used to fabricate thin layers of semiconductors, metals and insulators by a precise control of thermally driven surface reactions. Radiant heat is used to produce large, yet rapid changes in the temperature of the semiconductor substrate. From a mixture of silane and oxygen gas SiO₂ layers have been fabricated at 700 degrees C. At this elevated temperature deposition rates of 100 Å/sec are obtained. These layers could be deposited on InP substrate with resulting specular surfaces. Optical as well as electrical characterization of these films indicates that the structure is perfectly suited for InP MIS-FET applications.

L3 ANSWER 4 OF 5 INSPEC COPYRIGHT 2000 IEE

AB Rapid thermal processing with **halogen** lamp heating is found to be effective in forming oxide-free titanium silicide. The silicidation reaction is completed within as short a time as 30 sec, and yields stoichiometric titanium disilicide with a resistivity of 14-16 μΩ-cm. A self-aligned silicidation achieved by oxide side walls combined with a LDD structure produces submicron MOS transistors with 2-3 Ω/sq of sheet resistance of source/drain and gate. The gate dielectric integrity and the junction integrity of silicided devices are comparable with those of control devices without silicidation.

L3 ANSWER 5 OF 5 INSPEC COPYRIGHT 2000 IEE

AB The unit described was designed with BUZ 4. SIPMOS transistors to supply low-voltage **halogen** lamps and uses a self-exciting half-bridge circuit. The circuits were designed for **halogen** lamps operating at 24 V/250 W, 24 V/150 W and 12 V/50 W. At rated duty the working frequency is approximately 120 kHz. This high frequency was chosen to keep the winding dimensions as small as possible and also to keep the RFI suppression requirements to a minimum. Efficiency achieved, depending on the power of the lamp, is between 85 and 90%. Weight is reduced to between one tenth and one fifteenth of that of a 50-Hz transformer.

=> **d his**

(FILE 'HOME' ENTERED AT 18:45:44 ON 30 AUG 2000)

FILE 'INSPEC' ENTERED AT 18:46:14 ON 30 AUG 2000

L1 5581 HALOGEN
E OXIDATION +ALL/CT
E GATE +ALL/CT
L2 10946 E6
L3 5 L1 AND L2

=>